

## REMARKS

Claims 1-4, 6-9, 11-13, 16-17, 19-22, 32, 34-35, 38, 40-41, 44, 46-47, 50, 52-53, 56, and 59-64 are now pending in the application. Claims 23-31 and 58 have been canceled without prejudice or disclaimer. Favorable reconsideration is respectfully requested in view of the above amendments and the following remarks.

The Office has required restriction to one of the following inventions under 35 U.S.C. §121, which it characterizes as:

Group I: Claims 1-22 [sic: 1-4, 6-9, 11-13, 16-17, 19-22], 32, 34-35, 38, 40, 41, 44, 46, 47, 50, 52, 53, 56, 59, 60-64 drawn to an input device for receiving an incoming stream of data packets of unpredictable size, and the input device is operable to distribute whole data packets of unpredictable size across the processing elements that the number of the processing elements across which each whole data packet is distributed is dynamically determined based on the size of the whole data packet, and the data packet is greater than a predetermined size divided in portions and each portion distributed to a respective processing element; and a data packet less than a predetermined size being distributed to a single processing element, classified in class 370, subclass 515.

Group II: Claims 23-31, 58 drawn to an input/output system for transferring data to and from a plurality of processing elements arranged in a single instruction multiple data (SIMD) array, the system being operable to transfer data packets of different sizes to respective ones of the processing elements in the array, classified in class 712, subclass 210.

In response, Applicants hereby elect the subject matter defined by the claims of group I, namely claims 1-4, 6-9, 11-13, 16-17, 19-22, 32, 34-35, 38, 40, 41, 44, 46, 47, 50, 52, 53, 56, 59, and 60-64.

The remaining claims, 23-31 and 58, have been canceled without prejudice or disclaimer. Applicants hereby expressly reserve the right to continue pursuing patent protection on the subject matter defined by these canceled claims in one or more divisional applications.

The application is believed to be in condition for allowance. Prompt notice of same is respectfully requested.

Respectfully submitted,  
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